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DETERMINANTS OF FINANCIAL INCLUSION AND ITS IMPACT ON THE SOCIO-ECONOMIC STATUS OF WOMEN

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ABSTRACT

This study investigates the determinants of financial inclusion and its impact on the socio-economic status of women in Tamil Nadu, India. The research emphasizes key dimensions such as bank account ownership, access to credit, and the use of digital financial services like mobile banking. A structured survey was administered to 420 women in the Madurai district using stratified sampling. The findings reveal that financial literacy, geographical access to banking infrastructure, and digital literacy are significant predictors of women's participation in formal financial systems. Notably, women with higher financial awareness were more likely to use mobile banking and obtain credit, especially in rural and hilly regions. The study also identifies persistent gender gaps in access to digital platforms and credit, underscoring structural barriers to inclusion. The results affirm the need for targeted financial education, gender-sensitive policies, and infrastructure development to foster inclusive financial systems that enhance women's socio-economic empowerment.

KEYWORDS: *Financial Inclusion, Women Empowerment, Socio-Economic Status, Financial Literacy, Digital Banking, Access to Credit.*

INTRODUCTION

Financial inclusion is widely recognized as a catalyst for poverty alleviation and inclusive economic development, enabling individuals to manage risks, build assets, and invest in income-generating activities that strengthen socio-economic participation. In India, initiatives such as digitalization, the expansion of banking infrastructure, and flagship programs like the Pradhan Mantri Jan Dhan Yojana (PMJDY) have accelerated efforts toward financial inclusion; however, persistent gender and regional disparities remain, particularly among rural women who face barriers of low financial literacy, limited mobility, restrictive cultural norms, and inadequate access to digital technologies. Socio-economic factors such as education, income, occupation, and marital status play a decisive role in shaping women's engagement with formal financial systems, with higher education and income levels linked to greater participation, while marginalized groups remain at risk of exclusion. The growing adoption of digital financial technologies such as mobile banking, fintech platforms, and digital payment apps offers new avenues for inclusion, yet gaps in digital literacy, infrastructure, and user trust threaten to exacerbate existing inequalities. Against this backdrop, the present study examines how socio-economic and technological factors influence women's level of financial inclusion and explores the impact of financial inclusion on their socio-economic status and empowerment.

Financial Inclusion

Financial inclusion is widely recognized as a key instrument for poverty reduction and inclusive economic development. By ensuring access to formal financial services, individuals are better able to manage risks, accumulate assets, and invest in productive opportunities, thereby strengthening their participation in the broader economy (Demirgüç-Kunt et al., 2022). A growing body of research affirms that financial inclusion not only enhances individual and household financial resilience but also fosters social progress by enabling entrepreneurship, facilitating access to credit, and promoting long-term financial security. This is particularly critical for marginalized populations, where inclusive financial systems serve as a foundation for reducing inequalities and achieving sustainable growth (Chakrabarty, 2011; Sarma & Pais, 2011; World Bank, 2020).

Role of Socio-Economic Factors

Socio-economic factors such as education, income level, occupational status, and gender play a decisive role in shaping financial inclusion outcomes. Marginalized groups particularly women and rural populations often encounter entrenched structural barriers, including low financial literacy, restrictive socio-cultural norms, and limited access to formal financial institutions (Allen et al., 2016; Sahay et al., 2015). These constraints contribute to persistent disparities in financial participation, even in the context of progressive policy reforms and the rapid expansion of digital financial innovations. Empirical studies consistently demonstrate that higher levels of education and income are positively associated with the likelihood of accessing and utilizing formal financial services, whereas disadvantaged groups remain disproportionately excluded (Sarma & Pais, 2011; Demirgüç-Kunt et al., 2022). Bridging these socio-economic divides is therefore essential for advancing an inclusive and equitable financial ecosystem that supports broader social and economic development.

Impact of Digital Financial Technologies

The rise of digital financial technologies such as mobile banking, e-wallets, and fintech platforms has significantly broadened access to financial services, particularly in underserved and remote regions. These innovations provide low-cost and convenient financial solutions in areas where traditional banking infrastructure remains inadequate (Ozili, 2018; GSMA, 2021). Mobile and digital platforms have facilitated large-scale access to transactions, savings, credit, and insurance, thereby transforming financial inclusion landscapes. However, barriers such as low digital literacy, unreliable internet connectivity, and limited smartphone penetration hinder their effective utilization (World Bank, 2020; Demirgüç-Kunt et al., 2022). Importantly, persistent gender gaps in digital access and technology adoption disproportionately affect women in rural and low-income settings, further entrenching existing inequalities (GSMA, 2021).

Addressing Gaps in Financial Inclusion

Despite significant global and national progress, financial inclusion gaps remain pronounced, especially among economically disadvantaged women in rural and peri-urban areas. Socio-economic inequalities, digital exclusion, and gender-based barriers continue to impede equitable participation in financial systems (Ghosh & Vinod, 2017). To address these challenges, policy measures must prioritize targeted financial literacy initiatives, women-centric financial products, and investments in digital infrastructure designed for underserved populations (Sahay et al., 2015; Chakrabarty, 2011). Building inclusive, accessible, and secure financial ecosystems requires collaborative efforts through multi-stakeholder partnerships among governments, financial institutions, and fintech providers. Furthermore, sustained empirical research is critical for evidence-based policymaking and for developing adaptive, inclusive models of financial inclusion that advance gender equity and drive long-term socio-economic transformation.

Determination of Owners of Bank Account

Bank account ownership, a key indicator of financial inclusion, is influenced by socio-economic, demographic, and institutional factors, particularly among marginalized groups. Income and education strongly determine account ownership, with higher resources and financial literacy enhancing individuals' ability to engage with formal financial systems (Demirgüç-Kunt et al., 2022). Gender disparities persist, as men generally have greater access to banking, though women-focused schemes have helped narrow this gap. Occupational status also matters, with formal sector workers more likely to hold accounts than informal workers facing documentation issues and unstable incomes (Allen et al., 2016). Urban residents benefit from greater banking infrastructure and digital access, while rural populations encounter barriers such as isolation, poor connectivity, and weak institutional outreach. Household size, socio-cultural norms, and community traditions further shape banking behavior. Recent advances in digital financial technologies and government-led literacy and awareness campaigns have reduced some of these barriers, empowering women, rural dwellers, and low-income groups to participate more actively in formal finance. Ensuring equitable account ownership thus requires parallel investments in education, digital infrastructure, and inclusive policy design.

Determinants of Usage of Mobile Banking

The adoption of mobile banking services is shaped by a complex interplay of technological, socio-economic, and individual-level factors. Access to affordable technology, particularly low-cost smartphones and reliable internet, is a primary enabler of engagement with digital financial platforms (GSMA, 2021; Demirgüç-Kunt et al., 2022). Financial and digital literacy further enhance adoption, as individuals familiar with financial products and mobile technologies are more likely to use mobile banking for transactions, savings, and credit (Sarma & Pais, 2011). Perceived convenience, usability, and trust in security features strongly influence sustained usage, while concerns over data

breaches, fraud, and transaction failures act as significant barriers (Ozili, 2018). Demographic factors such as age, gender, income, and education also determine adoption patterns, with younger, better-educated, and higher-income individuals more likely to adopt mobile services, whereas women in conservative socio-cultural contexts and older populations often face digital exclusion (Ghosh & Vinod, 2017). Government initiatives promoting digital literacy, subsidized smartphones, and incentives for digital transactions have helped bridge gaps, particularly in rural and semi-urban areas (World Bank, 2020). In addition, social influence through peers, families, or self-help group leaders plays a crucial role in reducing perceived risks and encouraging adoption. Finally, platforms offering a wide range of services such as transfers, bill payments, micro-savings, loans, and insurance are more effective in sustaining long-term user engagement across diverse population segments.

Determinants of Usage of Credit

The adoption of mobile banking services is shaped by a complex interplay of technological, socio-economic, and individual-level factors. Access to affordable technology, particularly low-cost smartphones and reliable internet, is a primary enabler of engagement with digital financial platforms (GSMA, 2021; Demirgüç-Kunt et al., 2022). Financial and digital literacy further enhance adoption, as individuals familiar with financial products and mobile technologies are more likely to use mobile banking for transactions, savings, and credit (Sarma & Pais, 2011). Perceived convenience, usability, and trust in security features strongly influence sustained usage, while concerns over data breaches, fraud, and transaction failures act as significant barriers (Ozili, 2018). Demographic factors such as age, gender, income, and education also determine adoption patterns, with younger, better-educated, and higher-income individuals more likely to adopt mobile services, whereas women in conservative socio-cultural contexts and older populations often face digital exclusion (Ghosh & Vinod, 2017). Government initiatives promoting digital literacy, subsidized smartphones, and incentives for digital transactions have helped bridge gaps, particularly in rural and semi-urban areas (World Bank, 2020). In addition, social influence through peers, families, or self-help group leaders plays a crucial role in reducing perceived risks and encouraging adoption. Finally, platforms offering a wide range of services such as transfers, bill payments, micro-savings, loans, and insurance are more effective in sustaining long-term user engagement across diverse population segments.

Review of Literature

Recent literature highlights the pivotal role of financial inclusion in advancing women's economic and social empowerment by enhancing their capacity to manage finances, pursue entrepreneurship, and exercise greater decision-making autonomy (Demirgüç-Kunt et al., 2018; Srivastava, 2024). Digital financial technologies, including mobile banking and fintech platforms, have further bridged geographic and socio-cultural barriers, expanding women's access to financial services in underserved regions (Allen et al., 2016; Sapre, 2023). Financial literacy consistently emerges as a critical determinant, improving women's participation in formal financial systems and reducing dependence on informal sources (Kaur & Gupta, 2021). In India, programs such as the Pradhan Mantri Jan Dhan Yojana (PMJDY) have significantly expanded women's access to banking, though challenges related to digital literacy, socio-cultural norms, and awareness gaps persist (Srivastava, 2024). Empirical studies across diverse contexts affirm that socio-economic and demographic factors particularly education, income, occupation, and location play a decisive role in shaping inclusion outcomes, with higher education and income positively associated with financial participation (Koomson et al., 2020; Balliester, 2022).

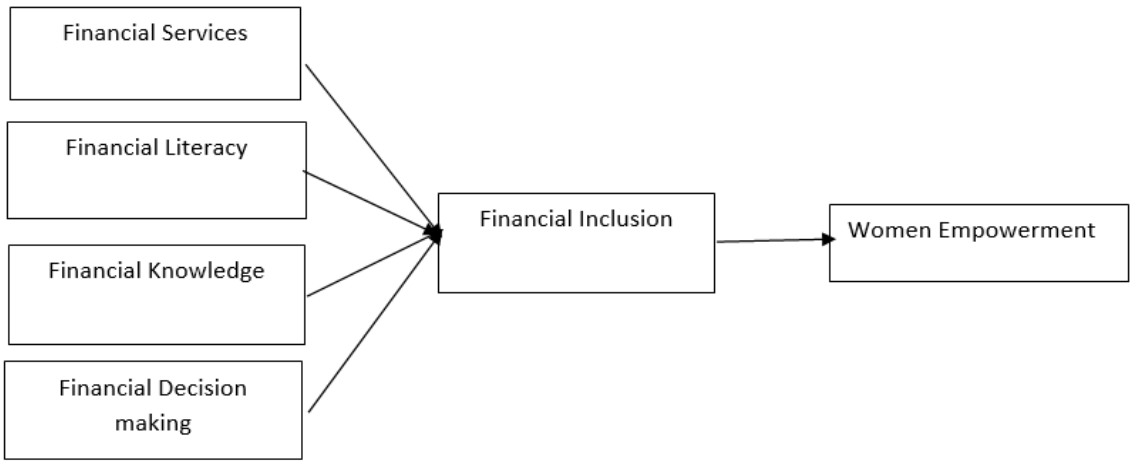
Regional and comparative studies reinforce these findings, underscoring the multidimensional nature of financial inclusion. Research from Kenya, Zimbabwe, and South Asia demonstrates that education, income, financial literacy, and digital access enhance inclusion, while barriers such as documentation requirements, limited infrastructure, and cultural restrictions persist (Cheronoh, 2019; Sanderson et al., 2018; Aziz et al., 2022). Indian studies reveal that women in rural and marginalized communities continue to face gendered inequalities, limited credit access, and mobile technology constraints (Kandari et al., 2021; Sethy et al., 2023). Broader cross-country analyses, including those in BRICS, Africa, and South Asia, highlight education, income, employment status, and place of residence as consistent drivers, though gender and institutional biases remain barriers (Ahmed et al., 2023; Soumaré et al., 2016; Lal, 2021). Collectively, the literature positions financial inclusion as a complex, multidimensional process shaped by socio-economic, technological, and institutional determinants, emphasizing the need for gender-responsive policies, targeted financial literacy initiatives, and investments in digital infrastructure to achieve equitable and sustainable financial access.

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Research Gap

Recent studies have underscored the vital role of financial inclusion in addressing socio-economic disparities and promoting equitable access to financial services; however, notable gaps persist in the existing literature. Limited research has explored regional disparities within countries, particularly how financial inclusion outcomes differ across rural, peri-urban, and marginalized communities. Moreover, while financial literacy initiatives and digital financial technologies have gained prominence, their specific effects on underserved groups, especially women in rural areas, remain underexamined. The interplay between macroeconomic indicators such as income distribution, employment rates, and economic growth with financial inclusion outcomes also requires deeper investigation to inform effective policy interventions. Furthermore, existing studies often emphasize individual socio-demographic determinants without sufficiently considering the combined influence of cultural, institutional, and structural factors that shape financial behavior and access. These gaps highlight the need for a holistic, context-specific approach that integrates socio-economic, cultural, and policy dimensions to develop inclusive financial systems capable of empowering disadvantaged populations and fostering sustainable socio-economic development.

Conceptual Framework



The conceptual framework of this study illustrates the relationship between financial determinants and women's socio-economic empowerment through financial inclusion, emphasizing four independent variables: Financial Services, Financial Literacy, Financial Knowledge, and Financial Decision-Making. Financial Services capture the availability and accessibility of formal products such as savings accounts, credit, insurance, and mobile banking, which reduce dependency on informal systems and enhance resource management. Financial Literacy reflects women's understanding of financial concepts and products, enabling informed choices and greater participation in formal systems, while Financial Knowledge relates to awareness of financial practices, risks, and benefits that build confidence in leveraging economic opportunities. Financial Decision-Making highlights women's autonomy in managing household and personal finances, savings, and investments, fostering independence and control over resources. Together, these determinants are hypothesized to strengthen Financial Inclusion, defined as women's effective access to and utilization of formal financial services, which in turn is expected to promote Women Empowerment through higher income, economic independence, decision-making participation, and enhanced socio-economic status in the rural context of Tamil Nadu.

Objective of the Study

- To examine the socio-economic factors influencing financial inclusion among women in the Madurai district of Tamil Nadu.
- To analyze key indicators of financial inclusion, including bank account ownership, access to credit facilities, and the use of mobile banking services.
- To identify the primary determinants affecting financial inclusion among rural and economically disadvantaged women.

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- To provide insights for developing targeted, gender-responsive policies and financial literacy initiatives aimed at promoting financial inclusion in underserved regions.
- To assess the socio-economic impact of financial inclusion on women's income generation, financial decision-making, and entrepreneurial activities.

Research Methodology

This study adopts an exploratory research approach to comprehensively analyze the determinants of financial inclusion and its impact on socio-economic disparities among rural women. The methodology is structured into the following key components:

Research Design

This study employs an exploratory research approach to examine the determinants of financial inclusion and its impact on socio-economic disparities among rural women. An exploratory design is appropriate given the need to understand diverse contextual variables such as regional disparities, socio-cultural norms, and the influence of digital financial tools and literacy. To strengthen analytical depth and reliability, the study adopts a mixed-methods design, integrating both quantitative data through structured surveys and qualitative insights obtained from focus group discussions. This methodological triangulation enhances the robustness and contextual interpretation of the findings.

Sampling Technique and Sample Size

The research was conducted in the Madurai district of Tamil Nadu, encompassing 13 development blocks. A stratified random sampling technique was employed to ensure adequate representation across diverse demographic and socio-economic subgroups. Strata were defined based on key variables such as income level, religion, occupation, and geographical location (rural, semi-urban, and urban clusters).

A total of 420 rural women respondents were selected, with proportional allocation from each development block based on population size and density. This stratified approach ensures statistical representativeness, minimizes sampling bias, and allows for comparative subgroup analysis across multiple dimensions of financial inclusion.

Purpose and Contribution

The methodological framework aims to generate empirically grounded, actionable insights for stakeholders including policymakers, financial institutions, and development practitioners. The study is intended to support the formulation of targeted financial inclusion strategies and gender-responsive programs that cater specifically to the needs of rural women. By capturing the intersections of financial behavior, access barriers, and socio-cultural dynamics, the research contributes to advancing inclusive economic development and sustainable community empowerment.

Table No.1
Socio-Demographic Profile

Parameter	Target Audience	Sample size	%
Age	Below 25 years	52	12.4
	26–35 years	124	29.5
	36–45 years	108	25.7
	46–55 years	82	195
	Above 55 years	54	12.9
Education Level	Higher Secondary	126	30.0
	Degree	142	33.8
	Postgraduate	94	22.4
	Professional Qualification	58	13.8
Occupation	Housewife	112	26.7
	Agricultural laborer	78	18.6
	Self-employed (including small business)	102	24.3
	Salaried employee (government/private)	88	21.0

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	Others (specify)	40	9.4
Monthly Household Income	Below Rs.15,000	148	35.2
	Rs.15,001 – Rs.30000	132	31.4
	Rs.30001 – Rs.45000	84	20.0
	Above Rs.45000	56	13.4
Marital Status	Married	358	85.2
	Unmarried	62	14.8
Geographical Location	Rural	202	48.1
	Semi- Urban	132	31.4
	Urban	86	20.5
Household Size	1–2 members	44	10.5
	3–4 members	158	37.6
	5–6 members	132	31.4
	Above 6 members	86	20.5
What type of bank account do you hold?	Savings account	178	10.5
	Jan Dhan Yojana account	104	37.6
	Joint account	70	31.4
	SHG-linked account	68	20.5
How frequently do you use your bank account?	Regularly (at least once a week)	140	42.4
	Occasionally (once a month)	126	24.8
	Rarely	92	16.7
	Never	62	16.2
The purpose of the loan	Business	98	33.3
	Education	46	30.0
	Medical	54	21.9
	Household expenses	100	14.8
	Agriculture	76	23.3
	Others (specify)	46	11.0
Do you use mobile banking or digital payment apps (e.g., Google Pay, PhonePe, BHIM)?	Regularly	110	12.9
	Occasionally	124	23.8

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	Rarely	96	18.1
	Never	90	11.0
What challenges do you face while using digital financial services?	Lack of smartphone	98	26.2
	Poor internet connectivity	88	29.5
	Lack of knowledge	94	22.9
	Fear of fraud	62	21.4
	No challenge	78	23.3
Who taught or introduced you to mobile banking?	Family member	142	21.0
	Friend	76	22.4
	SHG leader	62	14.8
	Bank staff	72	18.6
	No one (self-learned)	68	14.8
Have you attended any financial literacy training or awareness program?	Yes	172	17.1
	No	248	16.2
How confident are you in managing your personal or household finances?	Very confident	104	41.0
	Somewhat confident	210	59.0
	Not confident	106	24.8
Who makes the financial decisions in your household?	Self	132	50.0
	Husband	108	25.2
	Jointly (with spouse/family)	148	31.4
	Others	32	25.7
Do you save money regularly?	Yes	292	35.2
	No	128	7.6

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Do you participate in any income-generating activity?	Yes	238	69.5
	No	182	30.5
Do you feel that access to financial services has improved your confidence and independence?	Strongly agree	108	56.7
	Agree	158	43.3
	Neutral	88	25.7
	Disagree	40	37.6
	Strongly disagree	26	21.0

The descriptive findings reveal that the surveyed rural women largely belong to economically productive age groups (26–45 years), with a notable share possessing higher secondary (30%) or degree-level (33.8%) education, which positively influences financial literacy and decision-making. Occupationally, respondents were diverse, with significant representation of housewives (26.7%), self-employed (24.3%), salaried employees (21%), and agricultural laborers (18.6%), reflecting varied financial needs. Income data showed that nearly two-thirds belonged to low-income households earning below ₹30,000 monthly, underscoring financial vulnerability and the need for inclusive services. Most respondents were married (85.2%), lived in medium-to-large households, and predominantly came from rural areas (48.1%), factors influencing financial responsibility and savings behavior. While savings and Jan Dhan accounts were widely held, a gap existed between account ownership and active usage, with only 42.4% using them regularly. Loan utilization was largely for household and subsistence needs, though a fair share was directed toward business and education, highlighting both welfare and productive dimensions of credit. Mobile banking adoption remained limited due to barriers such as poor connectivity, lack of smartphones, low digital literacy, and fraud concerns, though peer networks (43.4%) played a greater role in promoting adoption than institutional support. Only 17.1% had attended formal financial literacy training, yet many expressed confidence in managing household finances, reflecting reliance on informal knowledge. Encouragingly, half of the respondents made independent financial decisions, and 69.5% were engaged in income-generating activities and regular savings, signaling growing autonomy. Importantly, all respondents agreed that access to financial services enhanced their confidence and independence, firmly establishing financial inclusion as a driver of women's empowerment in rural contexts.

Correlation Analysis

Objective: To determine the relationship between financial literacy, digital usage, financial access, decision-making autonomy, and women's empowerment.

Table No.2
Correlation

Variables	**1**	**2**	**3**	**4**	**5**
1. Financial Literacy	1				
2. Digital Financial Literacy	0.538**	1			
3. Access to Financial Services	0.495**	0.510**	1		
4. Financial Decision-Making Autonomy	0.593**	0.478**	0.522**	1	
5. Women's Empowerment & Socio-Economic Impact	0.622**	0.568**	0.544**	0.681**	1

Note: **$p < 0.01$**, all correlations are significant at the 0.01 level (2-tailed)

The Pearson correlation analysis (Table 2) revealed that financial literacy, digital financial literacy, access to financial services, financial decision-making autonomy, and women's empowerment are all positively and significantly correlated at the 0.01 level, underscoring their strong interconnectedness in advancing financial inclusion and empowerment. Financial literacy exhibited a strong positive relationship with women's empowerment ($r = 0.622$, $p < 0.01$), indicating that enhanced financial knowledge substantially contributes to women's confidence, autonomy, and

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socio-economic progress, while the strongest correlation was observed between financial decision-making autonomy and empowerment ($r = 0.681$, $p < 0.01$), highlighting the pivotal role of self-agency in utilizing financial tools for personal and household development. Moreover, digital financial literacy showed moderate to strong positive correlations with both access to financial services ($r = 0.510$) and women's empowerment ($r = 0.568$), reflecting the critical importance of digital competence in navigating modern financial systems. Collectively, these findings validate the study's conceptual model and affirm that financial knowledge, access, autonomy, and digital skills function as essential pathways to achieving sustainable empowerment among rural women.

Table No.3
ANOVA – Financial Literacy by Education Level

Source	Sum of Squares	df	Mean Square	F	Sig. (p-value)
Between Groups	32.80	3	10.93	9.42	0.000
Within Groups	480.54	416	1.15		
Total	**513.34**	419			

The above Table 3 revealed a statistically significant difference in financial literacy levels across various education groups, as indicated by the ANOVA result ($F = 9.42$, $p < 0.001$). Women possessing postgraduate degrees or professional qualifications demonstrated significantly higher levels of financial literacy compared to those with only higher secondary education. This underscores the positive relationship between formal educational attainment and financial competence, highlighting how advanced education equips women with better understanding and management of financial concepts, tools, and services.

Table No.4
ANOVA – Mobile Banking Use by Occupation

Source	Sum of Squares	df	Mean Square	F	Sig. (p-value)
Between Groups	28.96	4	7.24	6.87	0.000
Within Groups	438.72	415	1.06		
Total	**467.68**	419			

Table 4 revealed a statistically significant difference in mobile banking usage among women across occupational categories ($F = 6.87$, $p < 0.001$), with salaried employees and self-employed women reporting higher usage than agricultural laborers and housewives. This indicates that women in formal or entrepreneurial occupations are more likely to adopt digital financial tools due to greater technological exposure, structured income flows, and higher financial literacy. These findings underscore occupational status as a critical determinant of digital financial inclusion and highlight the need for targeted digital literacy and access programs for informal workers and homemakers to reduce disparities and foster inclusive digital engagement.

Table No.5
ANOVA – Empowerment by Monthly Household Income

Source	Sum of Squares	df	Mean Square	F	Sig. (p-value)
Between Groups	34.42	3	11.47	8.15	0.000
Within Groups	584.67	416	1.41		
Total	**619.09**	419			

Table 5 presents the ANOVA results examining the impact of monthly household income on women's empowerment, revealing a statistically significant variation across income groups ($F = 8.15$, $p < 0.001$). Women from households earning above ₹30,000 reported higher empowerment levels, reflected in greater confidence, autonomy in financial decision-making, and active participation in economic activities. This indicates that income level is a key determinant of empowerment, as financial stability enhances access to formal financial services, digital platforms, and opportunities for self-reliance. The findings emphasize the need for inclusive financial policies and targeted interventions such as financial literacy programs, affordable digital infrastructure, and tailored financial products to support lower-income households. Overall, the results highlight the critical role of income security and financial inclusion in advancing women's socio-economic empowerment, particularly in rural and semi-urban contexts.

Findings of the Study

The study, based on data from 420 rural women in Madurai district, Tamil Nadu, revealed that financial literacy, digital capabilities, access to financial services, and decision-making autonomy significantly contribute to women's

empowerment. Correlation analysis showed strong positive associations among all variables, with the highest link between financial decision-making autonomy and empowerment ($r = 0.681$, $p < 0.01$), followed by financial literacy ($r = 0.622$, $p < 0.01$), emphasizing the importance of self-agency and financial knowledge in fostering confidence and economic mobility. Digital financial literacy also played a vital role, moderately correlating with both access to financial services ($r = 0.510$) and empowerment ($r = 0.568$), highlighting the growing role of technology in inclusive growth. ANOVA results confirmed significant differences in financial literacy across education levels ($F = 9.42$, $p < 0.001$), with women holding postgraduate or professional qualifications displaying superior financial knowledge. Similarly, mobile banking usage varied significantly by occupation ($F = 6.87$, $p < 0.001$), with salaried and self-employed women using such services more than housewives and agricultural laborers, underscoring the influence of income stability and occupational exposure on digital adoption. Finally, empowerment was found to be significantly associated with monthly household income ($F = 8.15$, $p < 0.001$), as women from households earning above ₹30,000 per month reported greater autonomy and participation in financial matters, reinforcing income security as a crucial determinant of empowerment.

Implications of Research

The findings of this study carry wide-ranging implications for advancing financial inclusion and socio-economic empowerment, particularly among rural women. For policymakers, the results highlight the urgency of designing context-specific financial inclusion policies that address regional disparities and socio-economic heterogeneity through strengthened financial infrastructure, integration of digital financial education in public programs, and removal of socio-cultural barriers to women's financial access. Financial institutions are encouraged to develop inclusive and user-friendly products such as microcredit schemes, gender-sensitive savings instruments, and mobile banking platforms while investing in awareness and trust-building campaigns to enhance engagement. Technological innovation emerges as a vital enabler, advocating the expansion of mobile banking, UPI-based transactions, and fintech solutions in underserved regions, with emphasis on usability, security, and affordability. From an academic perspective, the study bridges gaps by offering an integrative framework linking financial literacy, digital access, decision-making autonomy, and empowerment outcomes, thereby providing a strong basis for further empirical studies in developing and emerging economies. Aligned with the United Nations SDGs (5, 8, and 10), the study affirms the role of inclusive financial systems in promoting equitable progress. Furthermore, CSR practitioners, NGOs, and development agencies can leverage these insights to design localized, participatory models combining financial literacy, digital training, SHG-based interventions, and community capacity-building that build trust, enhance resilience, and foster sustainable behavioral change in rural financial engagement.

Conclusion

This study examined the socio-economic determinants of financial inclusion and its influence on women's empowerment in the rural regions of Madurai district, Tamil Nadu, using an exploratory mixed-methods approach that considered indicators such as bank account ownership, mobile banking usage, and access to credit facilities, and found significant correlations between financial literacy, digital financial engagement, decision-making autonomy, and women's access to formal financial services; while financial inclusion was shown to have a transformative impact by enhancing income stability, savings behavior, entrepreneurial activity, and household as well as community-level decision-making power, persistent barriers such as socio-cultural norms, inadequate financial awareness, and infrastructural limitations continue to restrict participation among marginalized women, thereby underscoring the need for gender-sensitive financial policies, inclusive digital innovations, and targeted awareness programs that can bridge prevailing disparities; the study contributes to academic literature by offering a conceptual framework integrating socio-economic, demographic, and institutional variables shaping financial inclusion outcomes, and aligns with India's national development strategies and global Sustainable Development Goals particularly SDG 1 (No Poverty), SDG 5 (Gender Equality), and SDG 8 (Decent Work and Economic Growth) by advocating for the development of equitable and inclusive financial ecosystems that serve as valuable resources for policymakers, financial institutions, NGOs, and grassroots actors promoting women's empowerment in rural and underserved regions.

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